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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,207	01/25/2002	Michael G. Lacey	SVC 7644US	1724

1688 7590 05/01/2003

POLSTER, LIEDER, WOODRUFF & LUCCHESI
763 SOUTH NEW BALLAS ROAD
ST. LOUIS, MO 63141-8750

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 05/01/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,207

Applicant(s)

LACEY, MICHAEL G.

Examiner

Frank M. Lawrence

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-14 is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 3, 8, 9, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. It is suggested that a comma be inserted following “and a binder” in line 2 of claim 9 for clarity.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4-6, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by the Japanese reference (JP 8-86542 A).
4. JP ‘542 teaches a filter drier for drying refrigerant in a refrigeration system, comprising a casing (4B) having an inlet and an outlet for conveying refrigerant, opposed funnel shaped end portions, a cylindrical intermediate portion having an inner surface between the end portions, and a molded core (5A) disposed in the casing between the inlet and outlet for receiving refrigerant flow. The core surface is molded with a wave shape that will define circular indentations around the core surface, and the casing is electromagnetically molded around the core to form circular protrusions that extend into the outer surface of the core, bonding the core within the casing and inhibiting axial movement (see abstract; figures; machine translation paragraphs 0001, 0007, 0010, 0011, 0013, 0018-0026). In this rejection the limitation of “extends into the outer surface of the core” in claim 4 has been interpreted to mean protruding past a plane formed by the outermost surface of the core, as shown in the instant drawings.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '542 in view of Figert (3,025,233).

7. JP' 542 discloses all of the limitations of the claim except that the core includes a frusto-conical portion and a passage having a closed end proximate the inlet. Figert ('233) discloses a filter drier for drying refrigerant in a refrigeration system, comprising a casing (20) having an inlet (23) and an outlet (24) for conveying refrigerant, opposed end portions, a cylindrical intermediate portion (22) having an inner surface between the end portions, a molded core (10) disposed in the casing between the inlet and outlet for receiving refrigerant flow, and a spring (27), plate (28) and gasket (29) protruding from the inner surface of the casing for engaging the outer surface of the core to inhibit axial movement. The core is formed from a molded desiccant and a binder and includes a cylindrical portion (13), a frusto-conical portion (12), a closed end (11) proximate the inlet, and an open end (16) proximate the outlet. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the core of JP '542 by including a frusto-conical portion and a passage having a closed end proximate the inlet in order to provide a configuration that has an increased surface area directly exposed to gas flow within the casing, resulting in a decreased pressure drop across the dryer.

Allowable Subject Matter

8. Claims 10-14 are allowed.
9. The following is an examiner's statement of reasons for allowance: Reasons for allowance of claims 10-14 are given in paper no. 3.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Claims 3, 8, 9, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: Claims 3, 8, 9, 17 and 18 each recite that the holding means bonding the core to the casing is the molded core binder, a feature that is not taught, disclosed or suggested in a single reference or a combination of references in the prior art of record in combination with a filter dryer using a molded core formed from dessicant and the binder.

Response to Arguments

12. Applicant's arguments filed March 12, 2003 have been fully considered but they are not persuasive. Applicant argues that JP '542 the concavo-convex casing that is formed over a preformed concavo-convex core does not anticipate the casing having a preformed protrusion of the instant invention, however it is submitted that the method of forming the protrusion does not distinguish the apparatus of claims 1, 4-6, 15 and 16 over the dryer of the JP '542 reference. The

final product as shown in figure 2 of JP '542 includes all of the structural limitations of the rejected claims.

13. The objections to the abstract and claims and the 112 rejections have been overcome by the submitted amendments. The 35 USC 102(b) rejection over Figert has been withdrawn because the patent does not disclose a preformed protrusion on the casing, which is interpreted as being an integral part of the casing as shown in the instant drawings.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 703-305-0585. The examiner can normally be reached on Mon-Thurs 7:30-5:00; alternate Fridays 7:00-4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

fl *fl*
April 28, 2003

DUANE SMITH
PRIMARY EXAMINER

DA
4-28-03